



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,545	02/25/2002	Sam L. Samuels	AD6799USNA	7978

23906 7590 08/09/2005

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER

AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/084,545

**Applicant(s)**

SAMUELS ET AL.

**Examiner**

Walter B. Aughenbaugh

**Art Unit**

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 32-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 24, 2005 (Amdt. F) has been entered.

### ***Acknowledgement of Applicant's Amendments***

2. New claims 36-38 presented in the Amendment filed on June 24, 2005 (Amdt. F) have been received and considered by Examiner.

## **REPEATED REJECTIONS**

### ***Claim Rejections - 35 USC § 103***

3. The 35 U.S.C. 103(a) rejection of claims 1-9, 11-14 and 17 made of record in paragraph 5 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

4. The 35 U.S.C. 103(a) rejection of claim 10 made of record in paragraph 6 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

5. The 35 U.S.C. 103(a) rejection of claim 15 made of record in paragraph 7 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

Art Unit: 1772

6. The 35 U.S.C. 103(a) rejection of claim 16 made of record in paragraph 8 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

7. The 35 U.S.C. 103(a) rejection of claims 32-35 made of record in paragraph 9 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

### ***NEW REJECTIONS***

#### ***Claim Rejections - 35 USC § 103***

8. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook in view of Fowler et al. and in further view of Campbell et al.

Cook, Fowler et al. and Campbell et al. teach the balloon catheter cover as discussed in paragraph 5 of the previous Office Action mailed November 30, 2004.

In regard to claim 36, Campbell et al. disclose a catheter balloon formed by helically wrapping a porous polytetrafluoroethylene film over a thin porous polytetrafluoroethylene tube (col. 9, lines 65-67) where the porous polytetrafluoroethylene tube has a wall thickness of about 0.10 mm (col. 10, lines 26-28). Therefore, one of ordinary skill in the art would have recognized to have formed the elastic fabric structure of Fowler et al. such that it has a thickness of about 0.10 mm since a thickness of 0.10 mm is a suitable thickness for a layer of a multilayer catheter balloon as taught by Campbell et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the elastic fabric structure of Fowler et al. such that it has a thickness

Art Unit: 1772

of about 0.10 mm since a thickness of 0.10 mm is a suitable thickness for a layer of a multilayer catheter balloon as taught by Campbell et al.

In regard to claim 37, Campbell et al. disclose that the minimum diameter after deflation of the catheter balloon formed by helically wrapping a porous polytetrafluoroethylene film over a thin porous polytetrafluoroethylene tube was 1.19 mm (col. 10, lines 55-57). Therefore, one of ordinary skill in the art would have recognized to have formed the balloon catheter cover taught by Cook, Fowler et al. and Campbell et al. such that it has a diameter of about 1.19 mm since a diameter of about 1.19 mm is a well known suitable diameter for a catheter balloon as taught by Campbell et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the balloon catheter cover taught by Cook, Fowler et al. and Campbell et al. such that it has a diameter of about 1.19 mm since a diameter of about 1.19 mm is a well known suitable diameter for a catheter balloon as taught by Campbell et al.

In regard to claim 38, Campbell et al. disclose that the catheter balloon formed by helically wrapping a porous polytetrafluoroethylene film over a thin porous polytetrafluoroethylene tube was inflated to a pressure of 6 atm (col. 10, lines 54-55), and therefore that the catheter balloon can withstand 6 atm of internal pressure. Therefore, one of ordinary skill in the art would have recognized to have formed the balloon catheter cover taught by Cook, Fowler et al. and Campbell et al. such that it can withstand 6 atm of internal pressure since 6 atm of internal pressure is an amount of pressure that catheter balloons are well known to be able to withstand as taught by Campbell et al.

Art Unit: 1772

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the balloon catheter cover taught by Cook, Fowler et al. and Campbell et al. such that it can withstand 6 atm of internal pressure since 6 atm of internal pressure is an amount of pressure that catheter balloons are well known to be able to withstand as taught by Campbell et al.

### *Response to Arguments*

9. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of claim 1 made of record in paragraph 5 of the previous Office Action mailed November 30, 2004 presented on pages 6-9 of Amdt. F have been fully considered but are not persuasive.

Applicant argues at the bottom of page 7 of Amdt. F that the basic principles "under which the Cook and Fowler constructions were designed to operate are NOT the same". Applicant supports this argument by asserting, without support, that the Cook fabric "allows the fabric to increase in length while being expanded in the radial direction". That the Cook fabric "allows the fabric to increase in length while being expanded in the radial direction" is not taught or suggested by Cook. The teaching of Cook that "an increase in diameter [of the balloon] does not require a decrease in length of the balloon" at col. 3, lines 54-55 is plainly not a teaching that the length of the balloon increases with an increase in diameter of the balloon. Cook explicitly states at col. 3, line 58 that "[b]alloon 12 is therefore of fixed length". Therefore, since the Fowler construction, when expanded radially, "expands much less or not at all in the axial direction" (col. 4, lines 33-37), the basic principle under which the Cook and Fowler constructions were designed to operate are indeed the same. Applicant's speculation in the second full paragraph of page 8 of Amdt. F is unsupported and contradicts Cook's explicit

Art Unit: 1772

teaching at col. 3, line 58 that “[b]alloon 12 is therefore of fixed length” during expansion and contraction. Therefore, the proposed replacement of the Cook fabric with the Fowler fabric does not result in a change in the basic principle under which the Cook construction was designed to operate. Furthermore, if Applicant provides convincing evidence that the balloon of Cook does necessarily expand in the axial direction when expanded radially, note that Fowler also teaches that the balloon expands in the axial direction when expanded radially in the embodiment of Fowler where the balloon “expands much less” in the axial direction than the radial direction when expanded radially (col. 4, lines 33-37).

10. Applicant’s arguments regarding the 35 U.S.C. 103(a) rejection of claims 2-9, 11-14 and 17 presented on page 9 of Amdt. F have been fully considered but are not persuasive.

Applicant’s arguments depend entirely upon Applicant’s arguments regarding the 35 U.S.C. 103(a) rejection of claim 1, which have been addressed above in this Office Action.

11. Applicant’s arguments regarding the 35 U.S.C. 103(a) rejections of claims 10, 15, 16 and 32-35 presented on page 9 of Amdt. F have been fully considered but are not persuasive.

Applicant’s arguments depend entirely upon Applicant’s arguments regarding the 35 U.S.C. 103(a) rejection of claim 1, which have been addressed above in this Office Action.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

Art Unit: 1772


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh

08/08/05

WBA

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

8/8/05